

Worksheet 7.3

Solve the equations:

1. $5 \sec(x) - 9 = 1$ for $0 \leq x \leq \frac{\pi}{2}$

2. $-12 \sin(x) + 1 = -5$ for $0 \leq x \leq \frac{\pi}{2}$

3. $2 \cos(x) - 1 = 0$ for $0 \leq x \leq \frac{\pi}{2}$

4. $\sin^2(x) - \sin(x) = 0$ for $0 \leq x \leq \frac{\pi}{2}$ Hint: Factor and use the Unit Circle.

5. $\csc^2(x) - 2 = 0$ for $0 \leq x \leq \frac{\pi}{2}$

6. Find all solutions in the range $0 \leq x < \frac{\pi}{2}$ to the equation $\tan^2(x) - 1 = 0$